IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claim 1 (Previously Presented): A method for routing optical packets using each of multiple wavelength labels, comprising:

executing on each packet a first operation to impart a wavelength dependent delay time to a plurality of optical pulses having different wavelengths at a same time axis position, said first operation resulting in conversion of optical packet address signals to a plurality of optical pulses having different wavelengths and having deviated time axis positions;

transmitting the plurality of optical pulses along a predetermined optical path and, when the optical path has dispersion, compensating for said dispersion;

executing a second operation on the optical pulses corresponding to a reverse process of said first operation, said second operation resulting in generation of a plurality of optical pulses having different wavelengths at a same time axis position; and

using signals of the plurality of optical pulses thus generated to determine a transmission route.

Claim 2 (Original): The method according to claim 1, in which a predetermined waveband used for one-bit address signals and a one-bit data signal waveband have identical bandwidths.

Claim 3 (Original): The method according to claim 1, in which a bandwidth allocated to data signals included in the optical packets is wider than a bandwidth allocated to the address signals.

Claim 4 (Previously Presented): The method according to claim 1, in which data signals and the optical packet address signals are transmitted with a predetermined time differential.

Claim 5 (Original): The method according to claim 1, in which the optical packet address signals include address information that is identified by wavelength information delimited by a predetermined waveband width and predetermined time differential information.

Claim 6 (Original): The method according to claim 1, in which the optical packet address signals include first address information that is identified by wavelength information delimited by a first waveband width, and second address information that is identified by wavelength information delimited by a second waveband width and predetermined time differential information.

Claim 7 (Previously Presented): The method according to claim 6, in which, based on the first address information, routing is performed by a first router configured to switch optical paths according to wavelength differences and, based on the second address information, routing is performed by a second router configured to switch optical paths according to time differences.

Claim 8 (Previously Presented): An optical packet router using each of multiple wavelength labels, comprising:

means for separating an optical packet into data signals and address signals, said address signals including optical pulses having different wavelengths and being identified by wavelength information delimited by a predetermined waveband width and predetermined time differential information included in optical packets;

means for demodulating address information delimited by the wavelength information from the address signals to obtain demodulated address information;

means for switching an optical switch in accordance with the demodulated address information; and

selection means that uses the optical switch or selecting an optical path for the data signals.

Claim 9 (Original): The router according to claim 8, in which the demodulation means uses a multi-section fiber Bragg grating.

Claim 10 (Previously Presented): An optical packet router using each of multiple wavelength labels, comprising:

a pulse light source that includes multi-wavelength laser light;

means for dividing pulse signals from the pulse light source into a plurality of light paths;

means for obtaining first pulse signals using a multi-section fiber Bragg grating following modulation of some divided pulse signals:

means for obtaining second pulse signals comprising means for reducing waveband width of other divided pulse signals and means for modulating the pulse signals with reduced bandwidths;

means for adjusting a time differential between the first pulse signals and second pulse signals; and

means for guiding the first and second pulse signals thus adjusted to a same light path.

Claims 11-12 (Canceled).